6560-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 52

[EPA-R04-OAR-2010-0255; FRL-9657-4]

Air Quality Implementation Plans; Kentucky; Attainment Plan for the Kentucky Portion of the Huntington-Ashland 1997 Annual PM<sub>2.5</sub> Nonattainment Area

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

SUMMARY: EPA is taking final action to approve a revision to the Kentucky state implementation plan (SIP) submitted by the Commonwealth of Kentucky, through the Kentucky Energy and Environment Cabinet, Division for Air Quality (DAQ), to EPA on December 3, 2008, for the purpose of providing for attainment of the 1997 fine particulate matter (PM<sub>2.5</sub>) national ambient air quality standards (NAAQS) in the Kentucky portion of the Huntington-Ashland, West Virginia-Kentucky-Ohio PM<sub>2.5</sub> nonattainment area (hereafter referred to as the "Huntington-Ashland Area" or "Area"). The Huntington-Ashland Area is comprised of Boyd County and a portion of Lawrence County in Kentucky; Cabell and Wayne Counties and a portion of Mason County in West Virginia; and Lawrence and Scioto Counties and portions of Adams and Gallia Counties in Ohio. The Kentucky plan at issue in this action (hereafter referred to as the "PM<sub>2.5</sub> attainment plan") pertains only to the Kentucky portion of the Huntington-Ashland Area. As proposed on January 30, 2012, EPA is approving Kentucky's PM<sub>2.5</sub> attainment plan, which includes an attainment demonstration; reasonably available control technology (RACT) and reasonably available control measures (RACM); reasonable further

progress (RFP); base-year and attainment-year emissions inventories; contingency measures; and, for transportation conformity purposes, an insignificance determination for direct PM<sub>2.5</sub> and nitrogen oxides (NOx) for the mobile source contribution to ambient PM<sub>2.5</sub> levels for the Commonwealth's portion of the Huntington-Ashland Area. This action is being taken in accordance with the Clean Air Act (CAA or Act) and the "Clean Air Fine Particle Implementation Rule," hereafter referred to as the "PM<sub>2.5</sub> Implementation Rule," published on April 25, 2007. EPA is also responding to adverse comments received on the proposed approval of Kentucky's PM<sub>2.5</sub> attainment plan.

**DATES:** This rule will be effective [insert date 30 days after date of publication in the <u>Federal Register</u>].

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA-R04-OAR-2010-0255. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the FOR

**FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30 excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Joel Huey, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, Region 4, U.S. Environmental Protection Agency, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-9104. Mr. Huey can also be reached via electronic mail at <a href="mailto:huey.joel@epa.gov">huey.joel@epa.gov</a>.

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## I. What Action is EPA Taking?

EPA is approving a SIP revision, submitted through the DAQ to EPA on December 3, 2008, for the purpose of demonstrating attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS for the Kentucky portion of the Huntington-Ashland Area. Specifically, EPA is approving Kentucky's

PM<sub>2.5</sub> attainment plan, which includes an attainment demonstration; an analysis of RACM/RACT; a RFP plan; base-year and attainment-year emissions inventories; contingency measures; and an insignificance determination for mobile direct PM<sub>2.5</sub> and NOx emissions for transportation conformity purposes for Kentucky's portion of the Huntington-Ashland Area.

EPA has determined that Kentucky's PM<sub>2.5</sub> attainment plan for the 1997 Annual PM<sub>2.5</sub> NAAQS for its portion of the Huntington-Ashland Area meets applicable requirements of the CAA and the PM<sub>2.5</sub> Implementation Rule. More detail on EPA's rationale for this approval can be found in EPA's January 30, 2012, proposed rulemaking for this action (*see* 75 FR 4510). Section III of this rulemaking responds to the adverse comments received on EPA's January 30, 2012, proposal.

# II. What is the Background for EPA's Action?

On April 25, 2007, EPA published the PM<sub>2.5</sub> Implementation Rule for the 1997 PM<sub>2.5</sub> NAAQS (72 FR 20586). This rule describes the CAA framework and requirements for developing SIPs to achieve attainment in areas designated nonattainment for the 1997 PM<sub>2.5</sub> NAAQS. Such attainment plans must include a demonstration that a nonattainment area will meet the applicable NAAQS within the timeframe provided in the statute. For the 1997 PM<sub>2.5</sub> NAAQS, an attainment demonstration must show that a nonattainment area will attain the standards as expeditiously as practicable, but within five years of designation (i.e., by an attainment date of no later than April 5, 2010, based on air quality data for 2007 through 2009). As mentioned above, Kentucky provided the Commonwealth's SIP revision with the attainment

plan (the subject of this rulemaking) for the Kentucky portion of the Huntington-Ashland Area on December 3, 2008.

On September 7, 2011, EPA published a final rulemaking with a determination that the Huntington-Ashland Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS. *See* 76 FR 55542. That determination was based on the most recent three years of complete, quality-assured, quality controlled and certified ambient air monitoring data showing that the Area has met the 1997 Annual PM<sub>2.5</sub> NAAQS. EPA also determined, in the September 7, 2011, rulemaking, and in accordance with CAA 179(c), that the Huntington-Ashland Area had attained the 1997 Annual PM<sub>2.5</sub> NAAQS by its applicable attainment date of April 5, 2010.

As discussed in the September 7, 2011, rulemaking, EPA's determination of attainment<sup>1</sup> suspended the obligation for the State to meet planning SIP requirements for the Area for so long as the Area continues to attain the 1997 Annual PM<sub>2.5</sub> NAAQS. See 40 CFR 51.1004(c). The state must still submit required emissions inventories consistent with appropriate timelines. The suspended planning SIP submission obligations include the attainment demonstration (including in this case the mobile source insignificance determination submitted to satisfy transportation conformity requirements), associated RACM/RACT, RFP and the associated contingency measures. Despite the suspension of the aforementioned requirements for the Huntington-Ashland Area for the 1997 Annual PM<sub>2.5</sub> NAAQS, Kentucky has requested that EPA take action on its planning SIP for this Area in part because the SIP submittal includes the insignificance

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<sup>&</sup>lt;sup>1</sup> The determination of attainment is not a redesignation of the Area from nonattainment to attainment and is not an indication that the Area will continue to maintain the standard for which the determination is made. It is merely a determination that the Area attained the standard for a particular three year period and also by the deadline. Please see EPA's September 7, 2011, rulemaking for more detail on the effects of a determination of attainment.

determination. Further, in September 2011, EPA agreed in a Consent Decree to take action on these submissions.

EPA notes that on December 22, 2011, EPA published a proposal to approve the State of Ohio's request to redesignate to attainment the Ohio portion of the Huntington-Ashland Area. 76 FR 79593. EPA has also received requests from Kentucky and the State of West Virginia to redesignate their respective portions of the Huntington-Ashland Area but has not yet proposed action on those submissions.

Monitoring data thus far available, but not yet certified, in the Air Quality System (AQS) database for 2011 show that this Area continues to meet the 1997 Annual PM<sub>2.5</sub> NAAQS at this time. As shown in the table below, ambient PM<sub>2.5</sub> levels in the Huntington-Ashland Area have declined steadily since Kentucky submitted its PM<sub>2.5</sub> attainment plan in 2008.

Annual Average Design Value Concentrations in the Huntington-Ashland Area

Site Name	County	Site Number	Design Values (Average of Three Consecutive Annual Average Concentrations) (μg/m³)			
			2008	2009	2010	2011*
Huntington	Cabell, WV	54-011-0006	15.2	14.3	13.1	12.1
Ashland Primary (FIVCO)	Boyd, KY	21-019-0017	13.4	12.4	11.4	10.9
Ironton DOT	Lawrence, OH	39-087-0012	13.4	12.2	12.2	11.4

<sup>\*</sup> Monitoring data for 2011 are available but not yet certified in the AQS database.

EPA understands that the Commonwealth chose not to withdraw the attainment plan SIP revision for the Huntington-Ashland Area because it includes a mobile insignificance

determination for direct PM<sub>2.5</sub> and NOx emissions from mobile sources. Therefore, as mentioned above, although the SIP planning requirements for the 1997 Annual PM<sub>2.5</sub> NAAQS have been suspended for the Huntington-Ashland Area, EPA is acting on Kentucky's attainment plan because of the Consent Decree obligation to do so and because it remains a submittal to EPA.

On January 30, 2012, EPA proposed to approve Kentucky's PM<sub>2.5</sub> attainment plan, which includes an attainment demonstration; RACT and RACM; RFP; base-year and attainment-year emissions inventories; contingency measures; and, for transportation conformity purposes, an insignificance determination for direct PM<sub>2.5</sub> and NOx for the mobile source contribution to ambient PM<sub>2.5</sub> levels for the Commonwealth's portion of the Huntington-Ashland Area. As mentioned above, more detail on EPA's rationale for this approval can be found in EPA's January 30, 2012, proposed rulemaking for this action. See 77 FR 4510. Section III of this rulemaking responds to the adverse comments received on EPA's January 30, 2012, proposal.

## **III.** What is EPA's Response to Comments?

On February 29, 2012, EPA received comments on EPA's January 30, 2012, proposal submitted by Robert Ukeiley on behalf of Sierra Club. In summary, the Commenter states EPA cannot approve the Kentucky December 3, 2008, SIP revision because it: (1) relies on inaccurate and inadequate emission reductions in its attainment demonstration modeling and emissions inventory, in part because of the status of the NOx SIP Call, CAIR and the industrial boiler/heater MACT (40 CFR part 63, subpart DDDDD); (2) relies on temporary and unenforceable emission reductions from the Big Sandy Power Plant; (3) has not been evaluated

for reasonably available control measures for the nonattainment area; and (4) includes on-road mobile source emission calculations which fail to consider 15 percent ethanol in gasoline. The complete set of comments is provided in the docket for this rulemaking. A summary of the specific comments and EPA's responses to them are provided below.

## **Emission Reductions**

**Comment 1:** The Commenter contends that it is problematic to "credit" emission reductions associated with the NOx SIP Call because that is a cap-and-trade program. The Commenter cites to *NRDC v. EPA*, 571 F.3d 1245, 1257 (D.C. Cir. 2009) for support of the proposition that, because EPA cannot predict which sources will reduce emissions, EPA cannot rely on the NOx SIP Call for future reductions. The Commenter makes a similar contention regarding the Clean Air Interstate Rule (CAIR).

The Commenter states that any source could decide at any time in the future to purchase emissions credits and increase its emissions and impacts to the Huntington-Ashland Area. The Commenter adds that emissions banking can also lead to violations of the NAAQS and prevents CAIR emission budgets from being permanent and enforceable emission limits. The Commenter concludes by explaining his opinion that, although DAQ modeled hypothetical effects of CAIR well beyond 2011 in its 2018 projected inventory, it is not even clear that EPA is fully enforcing CAIR at this point.

**Response 1:** EPA notes that the Huntington-Ashland Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS by the applicable attainment date of April 5, 2010, and that the emission control

measures that led to that attainment were in place at least through that date. For this PM<sub>2.5</sub> attainment plan the modeled attainment year is 2009. The year 2018 was modeled by the Visibility Improvement State and Tribal Association of the Southeast (VISTAS) for the purposes of Kentucky's Regional Haze SIP.

EPA disagrees with the Commenter's position that emission reductions occurring within the relevant nonattainment area cannot be relied upon for the purpose of attainment demonstrations if they are associated with the emissions trading programs established in the NOx SIP Call and CAIR. The case cited by the Commenter *NRDC v. EPA*, 571 F.3d 1245 (D.C. Cir. 2009), does not support the Commenter's position and is entirely consistent with EPA's position here. That case addressed EPA's determination that the nonattainment RACT requirement was satisfied by the NOx SIP Call trading program. The court emphasized that reductions outside the nonattainment area do not satisfy the RACT requirement and thus held that because EPA had not shown the trading program would result in sufficient reductions *in a nonattainment area*, its determination that the program satisfied RACT was not supported.<sup>2</sup> *Id.* at 1256-58. The court did not hold, as the Commenter suggests, that emissions trading programs must be ignored when evaluating nonattainment area requirements.

There is simply no support for the Commenter's argument that attainment modeling demonstrations must ignore all emission reductions achieved by the NO<sub>X</sub> SIP Call and CAIR simply because the mechanism used to achieve the reductions is an emissions trading program. As a general matter, these programs cap and permanently reduce the total emissions allowed by

<sup>&</sup>lt;sup>2</sup> The court specifically elected not to vacate the RACT provision and left open the possibility that EPA may be able to reinstate the provision for particular nonattainment areas if, upon conducting a technical analysis, it finds the NOx SIP Call results in greater emissions reductions in a nonattainment area than would be achieved if RACT-level controls were installed in that area. *Id.* at 1258.

source subject to the programs. Any purchase of allowances and increase in emissions by one source covered by the program necessitates a corresponding sale of allowances and reduction in emissions by another covered source. Given the regional nature of particulate matter, the corresponding emission reduction will have an air quality benefit that will compensate, at least in part, for the impact of any emission increase. Where an area can show that it will attain the standard with the reductions from enforceable trading programs, as done here,<sup>3</sup> the area may take credit for the reductions from that program.

The Commenter's contention that EPA cannot rely on trading programs that allow banking is also not on point. The comment is not relevant in this context where the trading programs in question were in place through the attainment deadline and the Area did attain by that deadline. The fact that the Huntington-Ashland Area attained the PM<sub>2.5</sub> standard by the April 2010 attainment date with these trading programs in place belies the argument that banking of allowances might cause the Area to fail to attain by its attainment date. Moreover, there is no support for the Commenter's contention, based on the flawed premise that allowance banking somehow renders those programs' emission reduction requirements impermanent or unenforceable, that EPA must ignore reductions associated with any trading program that allows banking. In general, banking provides economic incentives for early reductions in emissions and encourages sources to install controls earlier than required for compliance with future caps on emissions. The fact that reductions may occur more quickly than required (freeing up allowances that may then be banked) does not, in any way, undermine the permanence or enforceability of the requirements in the underlying rule.

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<sup>&</sup>lt;sup>3</sup> Although CAIR was remanded to EPA in 2008, it remained in force and enforceable through the April 5, 2010, attainment date.

In sum, contrary to petitioner's contention, the decision of D.C. Circuit in *NRDC v EPA* does not establish that emission reductions from cap and trade programs, or emission reductions from cap and trade programs that allow banking, may not be relied upon for attainment modeling demonstrations. As discussed in EPA's proposal notice, DAQ utilized appropriate emissions inventory and modeling guidance to make this demonstration, which is consistent with the Area's current status as attaining the standard. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

With regard to CAIR, EPA published this rule on May 12, 2005, to address the interstate transport requirements of the CAA. *See* 76 FR 70093. As originally promulgated, CAIR requires significant reductions in emissions of sulfur dioxide (SO<sub>2</sub>) and NOx to limit the interstate transport of these pollutants. In 2008, however, the D.C. Circuit remanded CAIR back to EPA. *North Carolina v. EPA*, 550 F.3d 1176. The Court found CAIR to be inconsistent with the requirements of the CAA, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur because it found that "allowing CAIR to remain in effect until it is replaced by a rule consistent with [the court's] opinion would at least temporarily preserve the environmental values covered by CAIR." *North Carolina v. EPA*, 550 F.3d at 1178. CAIR thus remained in place following the remand and was in place and enforceable through the April 5, 2010, attainment date.

In response to the court's decision, EPA has issued a new rule to address interstate transport of NOx and SO<sub>2</sub> in the eastern United States (i.e., the Transport Rule, also known as the Cross-State Air Pollution Rule). *See* 76 FR 48208, August 8, 2011. In the Transport Rule, EPA

finalized regulatory changes to sunset (i.e., discontinue) CAIR and the CAIR FIPs for control periods in 2012 and beyond. *See* 76 FR 48322.

On December 30, 2012, the D.C. Circuit issued an order addressing the status of the Transport Rule and CAIR in response to motions filed by numerous parties seeking a stay of the Transport Rule pending judicial review. In that order, the D.C. Circuit stayed the Transport Rule pending the court's resolution of the petitions for review of that rule in *EME Homer Generation*, *L.P.* v. *EPA* (No. 11-1302 and consolidated cases). The court also indicated that EPA is expected to continue to administer CAIR in the interim until the court rules on the petitions for review of the Transport Rule.

EPA does not believe that the circumstances set forth above make it inappropriate, in any way, to finalize its proposed approval of the Huntington-Ashland attainment plan. While the data that shows the Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS by the April 2010 attainment deadline is impacted by CAIR, which is in place only temporarily, EPA's analysis for the Transport Rule demonstrates that the Area would be able to attain the NAAQS even in the absence of CAIR. *See* Appendix B to the Air Quality Modeling Final Rule Technical Support Document for the Cross-State Air Pollution Rule. Moreover, although the court has stayed the implementation of the Transport Rule at this time, EPA believes that the rule has a strong legal basis. To the extent that the current status of CAIR and the Transport Rule affect any of the criteria for approval of this SIP revision, EPA believes that the ongoing implementation and enforcement of CAIR during the period of the stay, coupled with the promulgation of the Transport Rule, provide adequate assurance of these components. EPA again notes that this action approves an attainment demonstration that the Area will attain in 2010, which the Area

did. As of 2010, CAIR was an enforceable control measure applicable to the Area. Any issues of the effect of the ongoing litigation surrounding the Transport Rule which will replace CAIR will need to be addressed by the Area in any plan demonstrating maintenance of the PM<sub>2.5</sub> standard into the future, which is not at issue in this attainment demonstration.

Comment 2: The Commenter contends that EPA cannot approve the Kentucky submittal because DAQ included, among its controls, a hazardous air pollutant rule found at 40 CFR part 63, subpart DDDDD, that was vacated in June 2007. More specifically, the Commenter suggests that EPA cannot rely on a claim that emission reductions attributed to a vacated rule will be an "insignificant fraction" of total emissions.

**Response 2:** As noted by the Commenter, nonattainment plans must include "a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants..." *See, e.g.*, CAA section 172(c)(3). As a point of clarification, this is the inventory EPA is approving for the purposes of CAA section 172(c)(3). Kentucky selected 2002 as the base year for the emissions inventory in accordance with 40 CFR 51.1008(b). The 2002 emissions inventory was based on data developed by VISTAS contractors and submitted by the states to the 2002 National Emissions Inventory. Several iterations of the 2002 inventories were developed for the different emission source categories resulting from revisions and updates to the data. This resulted in the use of version G2 of the updated 2002 emissions inventory, which does not include the boiler MACT reductions.

EPA also notes that DAQ not only acknowledges that the final 2009 inventory and modeling demonstration include emissions reductions attributable to the vacated rule, but also provides a reasonable demonstration for why such inclusion does not impact the results of the modeling. Following detailed analysis and presentation of calculations, DAQ summarizes that the emissions sensitivity results for the Boyd County, Kentucky, monitor indicate that the SO<sub>2</sub> and primary PM<sub>2.5</sub> emissions assumed under the vacated boiler MACT would result in a total increase in the ambient PM<sub>2.5</sub> concentration of 0.0009 micrograms per cubic meter (μg/m³). DAQ reasonably concluded that this level of impact would not change the conclusion that the Huntington-Ashland Area would attain the 1997 Annual PM<sub>2.5</sub> NAAQS by its applicable attainment date of April 5, 2010. As EPA indicated earlier in this rulemaking, EPA determined that the Huntington-Ashland Area attained the standard by April 5, 2010. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

## **Big Sandy Power Plant**

Comment 3a: The Commenter asserts that the Big Sandy Power Plant in Lawrence County, Kentucky, is the largest single source of PM<sub>2.5</sub> precursor emissions in the Huntington-Ashland Area and raises several issues associated with Kentucky's treatment of the plant's emissions. First, the Commenter contends that DAQ's attainment year modeling relies on artificially low emissions from the Big Sandy Power Plant because, the Commenter alleges, Kentucky modeled attainment during 2008, which the Commenter states was the "largest economic recession in recent times." To support its contention, the Commenter identifies heat input data and SO<sub>2</sub> and

NOx emissions data for Big Sandy's Unit 1 and Unit 2 for the years 2007 through 2010. The Commenter concludes by saying that EPA must require Kentucky's SIP to include enforceable limits for both Big Sandy units, restricting emissions to the lowest levels achieved during the attainment modeling years, 2007-2011.

**Response 3a:** As an initial point of clarification, Kentucky modeled attainment during 2009, not 2008 as stated by the Commenter. See Chapter 6 of the attainment demonstration narrative. Additionally, as shown in EPA's January 30, 2012, proposal notice, all 2009 predicted (modeled) annual PM<sub>2.5</sub> design values for the monitors of the Huntington-Ashland Area were higher than the values actually measured at those sites in 2009. Further, the emissions assumed for the Big Sandy Power Plant were projections based upon DAQ's knowledge of the facility's future plans when the modeling was performed, not actual emissions that occurred in 2008. Based on actual ambient data, EPA has already determined that the Area attained the 1997 Annual PM<sub>2.5</sub> standard by its April 5, 2010, attainment date. The 2008 economic downturn was irrelevant to, and in fact occurred after, the modeling results were produced. Finally, EPA finds that the modeling conducted for the 2009 attainment year used the VISTAS Best & Final emissions inventory. See PM<sub>2.5</sub> attainment plan submittal, Appendix F ("DRAFT Documentation of the Base G2 and Best & Final 2002 Base Year, 2009 and 2018 Emission Inventories for VISTAS"), page 3. This inventory shows Big Sandy Unit 1 having neither selective catalytic reduction (SCR) nor a scrubber in 2009, and Unit 2 having SCR since 2003 but no scrubber in 2009. See PM<sub>2.5</sub> attainment plan submittal, Appendix I ("EGU CONTROLS FOR COAL AND OIL/GAS UNITS FOR THE BEST & FINAL INVENTORY") of Appendix F, page 260. This is consistent with

what is shown for these units on EPA's Clean Air Market Division's website. For these reasons, EPA has determined that the Commenter has not provided a basis on which to disapprove the revision with respect to the above-described modeling issues.

With regard to the Commenter's statements about emission limits, the Big Sandy facility has numerous emission limitations for relevant pollutants. In addition, the facility was included in the October 2007 federal Consent Decree resolving an enforcement matter between EPA and American Electric Power Company which operates the Big Sandy facility. See <a href="http://www.epa.gov/compliance/resources/cases/civil/caa/americanelectricpower1007.html">http://www.epa.gov/compliance/resources/cases/civil/caa/americanelectricpower1007.html</a> (last visited 3/15/12) for additional information. The facility is also subject to a number of other CAA programs including but not limited to the regional haze program. As part of Kentucky's regional haze SIP, on which EPA recently took final action, the facility will be installing ammonia injection controls on Unit 1 and flue gas desulfurization on Unit 2.4 Through these and other requirements, the facility is subject to enforceable emission limits. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

Comment 3b: The Commenter states that DAQ's attainment demonstration modeling lists emission controls at the Big Sandy Power Plant inaccurately. The Commenter contends that DAQ made adjustments to its Integrated Planning Model (IPM) results for the 2009 and 2018 electric generating unit (EGU) inventories to account for various control measures and that this renders DAQ's modeling flawed for the attainment year of 2009. The Commenter concludes that

<sup>&</sup>lt;sup>4</sup> Final action was signed by the Region 4 Administrator on March 13, 2012.

EPA should require DAQ to include in the Kentucky SIP an enforceable schedule for installation of a SCR and scrubber at Big Sandy.

**Response 3b:** As noted in the response above, the modeling presented by Kentucky used the correct assumptions about emission controls at Big Sandy in 2009. The 2002 emissions inventory was based on data that was developed by the VISTAS contractors and submitted by the states to the 2002 National Emissions Inventory. As required by section 172(c)(3), and as discussed in the modeling documentation submitted by Kentucky, the 2002 base year inventory is an inventory of actual emissions in the Area. For the projected 2009 attainment year inventory, VISTAS relied primarily on the IPM to project future power generation and to calculate the impact of future emission control programs as of October 1, 2007. The State and local agencies were then asked to identify any updates needed to better reflect current information on when and where future controls would occur based on the best available data from state rules, enforcement agreements, compliance plans, permits and other sources. See PM<sub>2.5</sub> attainment plan submittal, Appendix F ("DRAFT Documentation of the Base G2 and Best & Final 2002 Base Year, 2009 and 2018 Emission Inventories for VISTAS"). Kentucky indicated that Big Sandy Unit 1 was not expected to have a scrubber or SCR control operational in 2009 (IPM had projected these controls would be by in use by Big Sandy Unit 1 in 2009). In February 2008, VISTAS used this updated information in completing the Best & Final inventory, which was used in the modeling relied upon by Kentucky.

Further, as explained earlier, the facility is subject to several CAA programs involving the installation of controls and/or specific emission limits for relevant pollutants. The Area has

demonstrated attainment of the PM<sub>2.5</sub> NAAQS already and, considering future controls and limits, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

## **Reasonably Available Control Measures**

**Comment 4a:** The Commenter raises several issues regarding the Huntington-Ashland Area's RACM/RACT analysis. First, the Commenter states that DAQ did not conduct a RACM/RACT analysis for this Area, but rather, another nearby area, the bi-state Louisville Area (Kentucky and Indiana).

Response 4a: Kentucky's December 3, 2008, SIP revision included attainment plans for all three of Kentucky's nonattainment areas for the 1997 Annual PM<sub>2.5</sub> NAAQS: Louisville, Kentucky-Indiana; Cincinnati-Hamilton, Ohio- Kentucky-Indiana; and Huntington-Ashland, West Virginia-Kentucky-Ohio. Although DAQ summarizes, in chapter 7 of the December 3, 2008 SIP revision, a detailed air quality analysis contracted for the Louisville Area, the overall RACM and RACT discussion is intended for all three of the identified PM<sub>2.5</sub> nonattainment areas.

EPA interprets RACT for PM<sub>2.5</sub> as linked to attainment needs of an area. If an area is attaining the PM<sub>2.5</sub> NAAQS, EPA deems the RACT requirement to be satisfied. Therefore, under EPA's interpretation of the RACT requirement, as it applies to PM<sub>2.5</sub>, Kentucky has satisfied the requirement.

In accordance with 40 CFR section 51.1004(c), EPA's September 7, 2011, determination that the Huntington-Ashland Area has attained the 1997 Annual PM<sub>2.5</sub> NAAQS suspended the requirement for the Area to submit an attainment demonstration and associated RACM, including RACT, related to the 1997 Annual PM<sub>2.5</sub> NAAQS. EPA has noted that certain language in the preamble of the PM<sub>2.5</sub> Implementation Rule contradicts the regulatory text in 40 CFR 51.1004(c). On May 22, 2008, EPA issued a memorandum "to eliminate any confusion that could result from this erroneous statement." Memorandum from William T. Harnett, Director, Air Quality Policy Division to Regional Air Division Directors, "PM2.5 Clean Data Policy Clarification." This memorandum states:

"Section 51.1004(c) provides that: 'Upon a determination by EPA that an area designated nonattainment for the  $PM_{2.5}$  NAAQS has attained the standard, the requirements for such area to submit attainment demonstrations and associated reasonably available control measures, reasonable further progress plans, contingency measures, and other planning SIPs related to attainment of the  $PM_{2.5}$  NAAQS shall be suspended. \* \* \* \*

"Section 51.1010 provides in part: 'For each PM<sub>2.5</sub> nonattainment area, the State shall submit with the attainment demonstration a SIP revision demonstrating that it has adopted all reasonably available control measures (including RACT for stationary sources) necessary to demonstrate attainment as expeditiously as practicable and to meet any RFP requirements.'

"Thus the regulatory text defines RACT as included in RACM, and provides that it is only required insofar as it is necessary to advance attainment. See also section 51.1010(b). As a result, when an area is attaining the standard, the suspension of the RACM requirement pursuant to 51.1004(c) necessarily includes the suspension of the RACT requirement."

EPA has already determined that the Huntington-Ashland Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS by its April 2010 attainment date based on controls that were in force at least through that date. In addition, as explained above, modeling done for the Cross-State Air Pollution Rule demonstrates that the Area would attain in the absence of CAIR. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

**Comment 4b:** The Commenter appears to disagree with EPA's interpretation of 40 CFR 51.1010 and contends that measures must be adopted which are necessary to demonstrate attainment as expeditiously as practicable.

Response 4b: Section 51.1010(b) of the PM<sub>2.5</sub> Implementation Rule provides that "[p]otential measures that are reasonably available considering technical and economic feasibility must be adopted as RACM if, considered collectively, they would advance the attainment date by one year or more." In order to advance the attainment date by at least one year, the state would first have to know their projected attainment date. As stated in EPA's January 30, 2012, proposed rulemaking, Kentucky participated in a modeling project of the Association for Southeastern Integrated Planning and VISTAS. Modeling projections were provided in January 2008. While showing the Area would attain by no later than five years from designation (i.e., by no later than April 5, 2010), there was not time for the State to develop measures that could possibly advance the attainment date by one year. This would have been particularly true for any new control requirements, which would have required a legislative rulemaking process that can take a year or

more. Further, as stated above, because the Huntington-Ashland Area is now attaining the PM<sub>2.5</sub> standard, Kentucky has satisfied the RACT requirement without need for further measures. *See* Memorandum from William T. Harnett cited above. In addition, as explained earlier, Kentucky did provide a RACM/RACT analysis that applied for the Huntington-Ashland Area. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

**Comment 4c:** The Commenter opines that EPA will not be able to redesignate the Huntington-Ashland nonattainment area until it conducts a RACM/RACT analysis, citing *Wall v. EPA*, 265 F.3d 426, 442 (6th Cir. 2001).

Response 4c: This action does not propose to redesignate the Huntington-Ashland Area to attainment. However, EPA disagrees with the Commenter's assertion that EPA will not be able to redesignate the Huntington-Ashland Area until a RACM/RACT analysis is conducted. The September 7, 2011, determination that the Huntington-Ashland Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS suspends the obligation to meet attainment planning requirements, including the RACM/RACT requirements so long as the Area continues to attain the 1997 Annual PM<sub>2.5</sub> NAAQS. *See* 40 CFR 51.1004(c). EPA disagrees with the Commenter's invocation, in the context of this rulemaking, of the ruling in *Wall v. EPA*. The *Wall* court addressed only the issue of adoption of RACT for ozone nonattainment areas under Part D subpart 2 of the Clean Air Act. Thus that case addressed a distinct set of statutory provisions for a different RACT requirement applicable only to ozone nonattainment areas. The *Wall* RACT ruling is therefore not applicable

or pertinent to the PM<sub>2.5</sub> RACT provision here. For these reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

#### **On-road Mobile Source Emissions Calculations**

Comment 5: The Commenter states that EPA recently decided to allow up to 15 percent ethanol content in gasoline (E15), 76 FR 4662 (Jan. 26, 2011), which the Commenter believes will lead to an increase in NOx and VOC emissions from many cars and light duty trucks, particularly those with pollution control devices not designed to deal with E15. The Commenter then contends that there is no indication that DAQ or EPA accounted for the increase in NOx and VOC emissions that will result from use of E15.

Response 5: EPA disagrees with the Commenter's suggestion that the Ethanol 15 (E15) rulemaking cited to by the Commenter will result in a significant increase in NOx and VOC emissions in the Huntington-Ashland Area. As a general point of background, E15 is not mandated by EPA. Rather, EPA granted a partial waiver for vehicles model years 2001 and newer, light duty vehicles (76 FR 4662) to be able to use E15. To receive a waiver under CAA section 211(f)(4), a fuel or fuel additive manufacturer must demonstrate that a new fuel or fuel additive will not cause or contribute to the failure of engines or vehicles to achieve compliance with the emission standards to which they have been certified over their useful life. Data used to act upon the approval of the E15 partial waiver showed that model year 2001 and newer vehicles would still meet their certified engine standards for emissions for both short and long term use, and use of E15 would not significantly increase the emission from these engines. EPA's partial

waiver for E15 is based on extensive studies done by the Department of Energy, as well as the Agency's engineering assessment to determine the effects of exhaust and evaporative emissions for the fleet prior to the partial waiver. The criteria for granting the waiver was not that there are no emission impacts of E15, but rather that vehicles operating on it would not be expected to violate their emission standards in-use.

As discussed in the waiver decision, there are expected to be some small emission impacts. E15 is expected to cause a small immediate emission increase in NOx emissions. However, due to its lower volatility than the E10 currently in-use, its use is also expected to result in lower evaporative VOC emissions. Any other emissions impacts related to E15 would be a result of misfueling of E15 in model year 2000 and older vehicles, and recreational or small engines. EPA has approved regulations dealing specifically with the mitigation of misfueling and reducing the potential increase in emissions from misfueling. 76 FR 44406 (July 25, 2011).

The partial waivers that EPA has granted to E15 do not require that E15 be made or sold. The waivers merely allow fuel or fuel additive manufacturers to introduce E15 into commerce if they meet the waivers' conditions. Other federal, state and local requirements must also be addressed before E15 may be sold. The granting of the partial waivers is only one of several requirements for registration and distribution of E15.

E15 may never be used in Kentucky. But even if it is, there is no indication that any potential emission impacts would significantly alter DAQ's calculation of on-road mobile source emissions because of the small and opposite direction of emission impacts, the limited vehicle fleet which can use it, and the measures required to avoid mitigating misfueling. For these

reasons, EPA disagrees that the Commenter has identified a basis on which EPA should disapprove Kentucky's attainment plan.

#### IV. Final Action

EPA is approving a revision to the Kentucky SIP submitted to EPA by DAQ on December 3, 2008, for the purpose of demonstrating how the Kentucky portion of the Huntington-Ashland Area will achieve attainment of the 1997 Annual PM<sub>2.5</sub> NAAQS by no later than April 5, 2010. EPA previously determined on September 7, 2011, that the Huntington-Ashland Area attained the 1997 Annual PM<sub>2.5</sub> NAAQS by its April 2010 attainment date. *See* 76 FR 55542, September 7, 2011. EPA has also determined that the Area has since continued to attain that NAAQS. Kentucky's December 3, 2008, SIP revision includes an attainment demonstration; RACT and RACM analyses; RFP; base-year and attainment-year emissions inventories; contingency measures; and, for transportation conformity purposes, an insignificance determination for direct PM<sub>2.5</sub> and NOx for the mobile source contribution to ambient PM<sub>2.5</sub> levels for the Commonwealth's portion of the Huntington-Ashland Area. After review and consideration of the relevant information and data, including the comments received, EPA has determined that Kentucky's December 3, 2008, SIP revision is consistent with the CAA and EPA's PM<sub>2.5</sub> Implementation Rule, and as such EPA is approving this SIP revision.

## V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address, as appropriate,
   disproportionate human health or environmental effects, using practicable and legally
   permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the Commonwealth, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the <u>Federal Register</u>. A major rule cannot take effect until 60 days after it is published in the <u>Federal Register</u>. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER]

OFFICE: insert date 60 days from date of publication of this document in the Federal Register].

Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (*See* section 307(b)(2).)

# **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference,
Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: March 29, 2012 A. Stanley Meiburg

Acting Regional Administrator,

Region 4

40 CFR part 52 is amended as follows:

# PART 52-[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

# Subpart S - Kentucky

2. Section 52.920(e) is amended by adding a new entry at the end of the table for "Huntington-Ashland 1997 PM<sub>2.5</sub> Attainment Plan" to read as follows:

# § 52.920 Identification of plan.

\* \* \* \* \*

(e) \* \* \*

**EPA-Approved Kentucky Non-regulatory Provisions** 

Name of non- regulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approval date	Explanation
**	**	**	*	
Huntington-Ashland 1997 PM <sub>2.5</sub> Attainment Plan	Boyd County; Portion of Lawrence County	12/03/2008	[Insert date of publication in Federal Register] [Insert citation of publication]	For the 1997 PM <sub>2.5</sub> NAAQS

[FR Doc. 2012-8561 Filed 04/10/2012 at 8:45 am; Publication Date: 04/11/2012]